tornadoAlert

User Manual

Early Alert Technologies LLC

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NOTICE TO USERS

The Early Alert Technologies, LLC Tornado Alert™ system (the "System") is designed to assist the user in determining and evaluating the likelihood of severe weather, such as thunderstorms and/or tornados, in the area that is being monitored by the System. **The System is in no way intended to be, or represented to be any form of protection whatsoever for persons or property.**

EARLY ALERT TECHNOLOGIES, LLC ITS AFFILIATES AND SUBSIDIARIES SHALL NOT BE LIABLE FOR AND HEREBY EXPRESSLY DISCLAIM ANY AND ALL LIABILITY FOR ALL DAMAGES OR LOSSES INCLUDING, WITHOUT LIMITATION, PROPERTY DAMAGE OR PERSONAL INJURY RESULTING FROM OR RELATED TO THE EFFECTS OF ANY SEVERE WEATHER SUCH AS TORNADOS OR THUNDERSTORMS.

THE SYSTEM IS DESIGNED TO PROVIDE THE USER WITH INFORMATION REGARDING POTENTIALLY SEVERE WEATHER SUCH AS TORNADOS OR THUNDERSTORMS IN THE MONITORED AREA. IF FOR ANY REASON THE USER IS UNCOMFORTABLE WITH ANY WEATHER SITUATION, EVEN IF THE SYSTEM HAS NOT PROVIDED A WARNING, THE USER SHOULD **IMMEDIATELY** TAKE THE APPROPRIATE STEPS TO ENSURE HIS OR HER SAFETY.

Please read this entire manual prior to using the System. The System will not operate properly if it is incorrectly installed or maintained or is placed near a source of radio interference such as a computers, printers, fax machines televisions, electrical motors (vacuum cleaners, dishwashers or electrical tools) or fluorescent lighting.

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PLEASE READ THIS LICENSE CAREFULLY. YOUR USE OF THE TORNADO ALERT SYSTEM CONSTITUTES YOUR AGREEMENT TO THE LIMITED LICENSE SET FORTH BELOW. IF YOU DO NOT AGREE TO THE TERMS OF THE LICENSE, DO NOT USE THE SYSTEM.

License and Restrictions

The Tornado Alert™ system (the "System") contains patent pending technology, hardware and proprietary software (the "Software"). Early Alert Technologies, LLC ("Licensor") hereby grants to the user a limited, non-exclusive right and license to use the Software with the System for the sole purpose of operating the system. The user shall not disassemble or reverse engineer the System, and shall not use the System or Software for any purpose other than as set forth in this user manual. The user shall not modify, translate, reverse engineer, decompile or duplicate the Software or System or any part thereof, or otherwise attempt to derive the Software's source code, and shall not authorize any third party to do so.

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User and not Licensor shall be responsible for the maintenance and upkeep of the System. Licensor shall have no liability whatsoever to the user or any third party for users failure to maintain the System.

Limited Software Warranty

Licensor warrants to the user that the Software shall perform substantially in accordance with its published specifications for a period of 30 days from the date of purchase (the "Software Warranty Period") when properly installed and used. This limited warranty does not apply to any defects resulting from (i) improper use or maintenance, (ii) any software, interface or products provided by a third party or (iii) the unauthorized use of the System or Software.

If Licensor receives notice of a reproducible Software error during the Software Warranty Period, Licensor will replace or modify the Software so that it does perform substantially in accordance with its published specifications. Licensor does not warrant that the operation of the System or Software will be uninterrupted or error free.

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General

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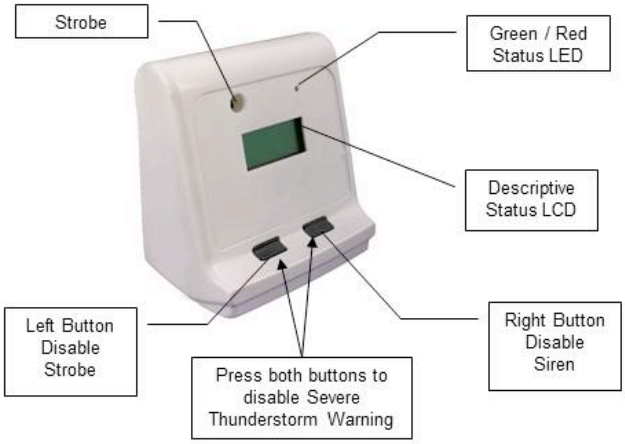
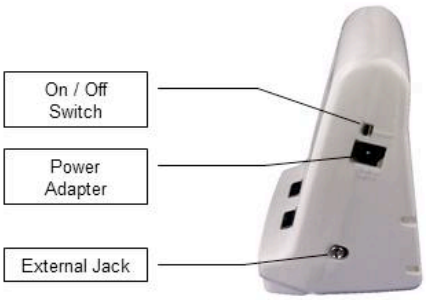
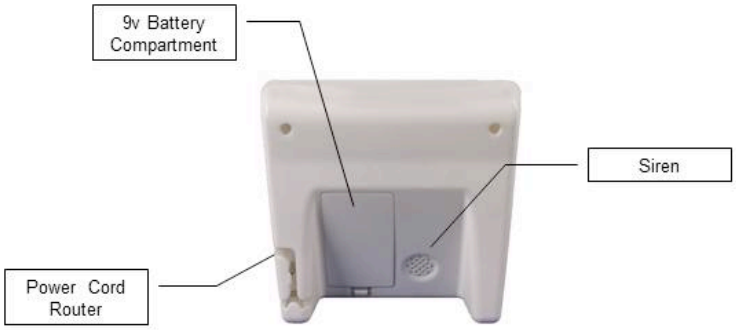
Getting to Know Your Device


Strobe
Green / Red Status LED
Descriptive Status LCD
Left Button Disable Strobe
Press both buttons to disable Severe Thunderstorm Warning
Right Button Disable Siren





Package Contents:

- Tornado Alert™ Unit
- AC Power Adapter
- Quick Start Guide
- User Feedback Card

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How It Works

The energy produced by severe weather can be detected and analyzed by monitoring radio frequency transmissions from the storm itself. Tornado Alert™ performs monitoring and analysis and activates both an audible siren and visual alarm based upon the intensity of electrical energy associated with a storm. The patent pending technology used by Tornado Alert™ was field tested across the United States for 7 years, including the deadly tornado outbreak of 2011. Unlike other devices on the market, Tornado Alert™ distinguishes between single dangerous lightning strikes, non-severe storms, severe thunderstorms and tornadoes. Tornado Alert™ issues alerts in real-time based directly upon storm activity in your specific location. The alerts are completely independent of any other alert systems. Specifically, Tornado Alert™ does not depend or rely upon the National Weather Service Emergency Alert System (EAS). This direct and immediate detection of storm activity gives the user an additional powerful tool to enhance their safety.

CAUTION: IF AT ANY TIME YOU FEEL UNSAFE DUE TO THE WEATHER IN YOUR AREA IMMEDIATELY TAKE STEPS TO ENSURE YOUR SAFETY.

The Tornado Alert™ features are:

- Battery backup in the event of power outage.
- Approximate range of detection of 30 miles providing a warning time of up to 30 minutes.
- Alerts specific to your location based on actual storm activity.
- Distinguishes between lightning, non-severe storms, severe storms and tornado activity.
- Displays the relative distance of the storm to your location.
- Audible and visual alert indicators selectable by the user.
- Provides for the external attachment of devices such as those for the hearing impaired or home alert systems using a 1/8” external jack.
- User controlled severe thunderstorm alerts.
- No programming required (no Specific Area Message Encoding (SAME))

Device Setup

Installing Battery

Tornado Alert™ requires an Industrial Grade or Lithium 9-volt battery to insure continuous operation during power outages. Since power outages increase during times of severe weather, battery backup is essential, especially at night. To install a battery, first remove the battery cover plate of the back of the unit. The battery compartment is designed such that the battery will only install if the positive (+) and negative (-) posts are properly aligned. If the battery does not easily fit into the compartment, change

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the orientation of the battery posts and try again. Once the battery is installed, replace the battery compartment cover.

IMPORTANT! Improper installation of the battery will cause the Tornado Alert™ not to function or function improperly.

IMPORTANT! The Tornado Alert™ system contains no user serviceable parts and is not intended to be opened, except for battery installation. Opening the main case or attempting to service the unit will void all warranties.

Selecting a Location

The most critical time to be aware of Tornado Alert™ warnings is during sleeping hours. During this time, the user is not receiving weather information from other sources such as television, radio or internet. Many users may find placing Tornado Alert™ in their bedroom an ideal location. For people who are hearing impaired, attachment to a bed or pillow shaker device is possible using the 1/8" external jack.

Since the technology depends upon the detection of radio frequencies, the placement location needs to be carefully selected. On power up, the device evaluates the radio interference at its location. If radio interference is detected, it will indicate this condition to the user so corrective action can be taken. The user can either remove the source of the interference or relocate the Tornado Alert™. Once Tornado Alert™ has passed these tests and is actively monitoring weather conditions, the device is able to ignore extraneous man-made interference. Follow the rules below to insure proper device operation:

- The device should be positioned close to an external wall within three (3) feet of a window.
- Avoid shielded locations such as internal rooms/hallways or below ground rooms.
- Keep other objects at least a few inches away from the device. Shielding of Tornado Alert™ antenna (located at the top of the enclosure) may affect its sensitivity to severe weather events. Never place objects directly on the device.
- Avoid placement within three(3) feet of devices that can cause interference such as:
    - Electrical motors (vacuum cleaners, dishwashers, electrical tools, etc.)
    - Fluorescent lights.
    - Electronic equipment (computers, printers, fax machines, televisions)
    - Air purifiers

Connecting the Power

Tornado Alert™ comes with a 12-volt A/C power supply for use. Plug this power supply into the Power Adapter slot (see picture below). Route power cord thru the slot at the back of the case if desired. A surge protector is highly recommended. Only the provided power supply should be used. Other power supplies may damage the unit or cause other issues with proper operation. If a replacement power supply is required, use only power supplies that meet the specification provided in this manual.

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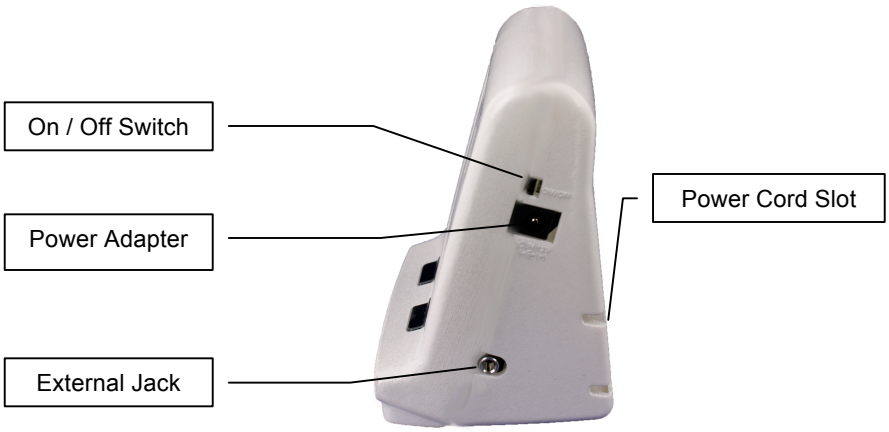


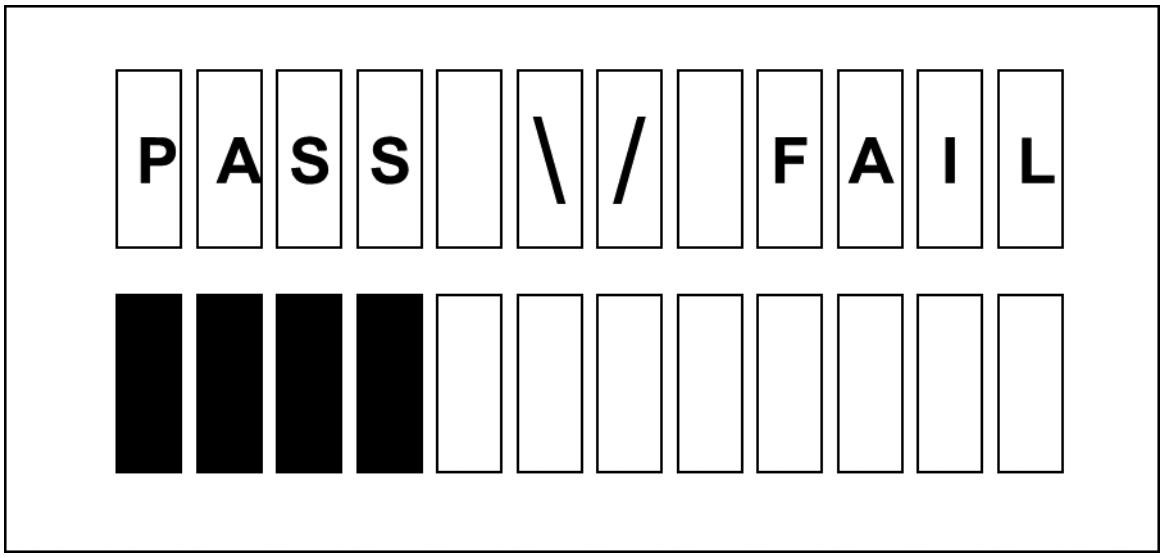
IMPORTANT! Use of a non-specified power supply will cause inaccurate or improper operation of the Tornado Alert™ system and will damage the system. Use of a non-specified power supply will void all warranties.

Power up Sequence

Turn on Tornado Alert™ using the slider power switch on the side of the unit. Tornado Alert™ begins performing a functional self-test. These tests will last approximately 10 seconds. During this time, several messages will be displayed on the LCD screen. You will also hear the audible siren and see the visual strobe alert.

Verifying Location

The last test verifies that Tornado Alert™ is not being affected by interference. During this test, the following screen is
displayed:



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In order to pass this test, no activity should be detected for 20 seconds. If excessive activity is detected, more bars will be darkened to the right, the LED light will turn red and the test will restart. Find a location where the number of bars darkened remains to the left of the "\/" indicator on the status LCD. Once the test completes successfully, the LCD will display "ALL CLEAR". The ALL CLEAR indicates that Tornado Alert™ passed all internal tests and is now operational. If the "PASS \/ FAIL" screen continues to be displayed, this indicates Tornado Alert™ has detected activity. This activity may be due to nearby storms. NOTE – Tornado Alert™ cannot be activated while active weather events are occurring. Another reason that can cause this condition is man-made interference described above in "Selecting a Location". The user should determine if storms are nearby and if so, wait until the storms are gone and try activating again. If no storms are nearby, try a different location.

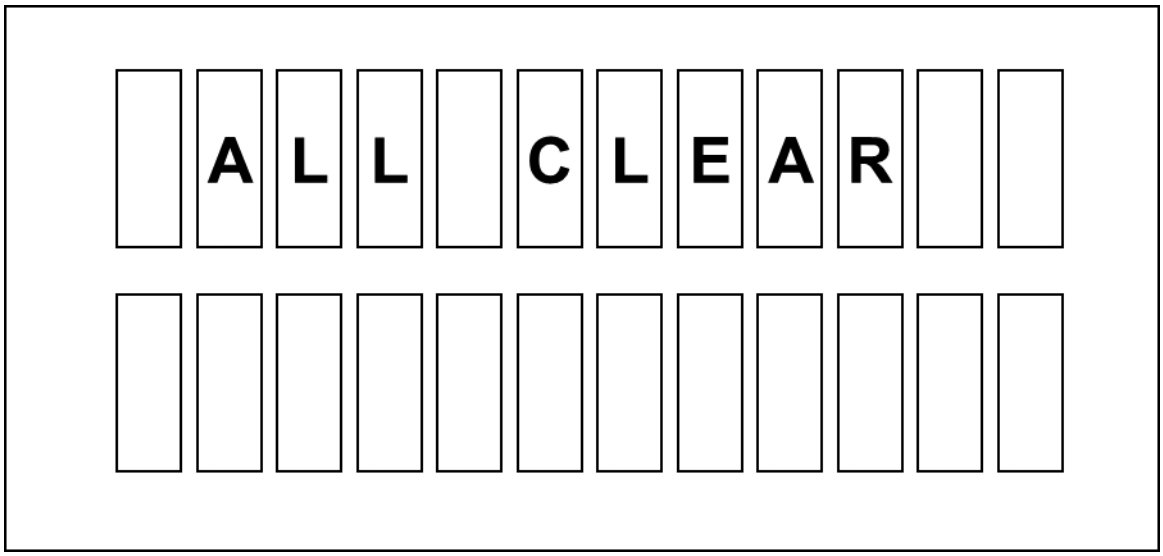
NOTE – Since Tornado Alert™ cannot be successful activated while storms are occurring in your area, the device should be left on continuously. Powering off the device when you leave your home or business is not recommended. If the device is moved, this procedure should be performed again in the new location on a clear day to insure no interference is present.

IMPORTANT! Tornado Alert™ cannot be successful activated while storms are occurring in your area. Activation during a storm will produce errors and inaccurate operation of the Tornado Alert™ system. If possible, check with other weather sources in your area to see if a storm is nearby before running this test. If they are nearby, wait for them to pass before running this test.

NOTE: The Tornado Alert™ system should be left on continuously. Powering off the device when you leave your home or business is not recommended.

Device Operation

The standard message displayed is shown below:



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This message indicates that Tornado Alert™ is functioning normally and no severe weather conditions exist. If activity is detected, one of the following messages, ranked from least to most significant, will be displayed:

- NOISE
- LIGHTNING
- NOT SEVERE
- SEVERE STORM
- TORNADO

The first and least significant condition detected by Tornado Alert™ is the NOISE condition. This indicates that radio interference, probably of man-made origins, is affecting the operation of the device. If this message is displayed, attempt to locate the source (i.e. vacuum cleaner) and either remove the offending source of noise or relocate the device.

Activity of categories LIGHTNING or NOT SEVERE may not require immediate action, particular if the user is indoors. However, these events do indicate that more severe conditions may rapidly develop. The bottom line of the LCD display will show one or more darkened bars from left to right. These bars indicate the relative distance from the detected activity. The more bars darkened, the closer the activity is to your location. Tornado Alert™ will update the status of conditions once every 60 seconds.

CAUTION: IF AT ANY TIME YOU FEEL UNSAFE DUE TO THE WEATHER IN YOUR AREA IMMEDIATELY TAKE STEPS TO ENSURE YOUR SAFETY REGARDLESS OF THE WARNING PROVIDED BY THE TORNADO ALERT™ SYSTEM

The category of SEVERE STORM corresponds to the National Weather Service definition of a severe thunderstorm. These conditions include either large hail or high winds and can cause severe damage or can be potentially life threatening. THEREFORE, THE SEVERE STORM ALERT SHOULD BE TAKEN SERIOUSLY AND YOU SHOULD TAKE IMMEDIATE STEPS TO ENSURE YOUR SAFETY. In addition to the message, Tornado Alert™ will sound the audible alarm, activate the flashing strobe light and change the LED light to yellow. The bottom line of the LCD display will show one or more darkened bars from left to right. These bars indicate the relative distance from the detected activity. The more bars darkened, the closer the activity is to your location. Tornado Alert™ will update the status of conditions once every minute.

The Tornado alarm is the most severe. This alert is given for conditions of extreme violent weather associated with a tornado. Like for severe storms, the audible alarm is sounded and the flashing strobe light is activated. **THE LED LIGHT IS CHANGED TO RED. THE USER SHOULD TAKE IMMEDIATE ACTION TO ENSURE THEIR SAFETY.** The bottom line of the LCD display will show one or more darkened bars from left to right. These bars indicate the relative distance from the detected activity. The more bars

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darkened, the closer the activity is to your location. Tornado Alert™ will update the status of conditions once every minute.

Button Functions

Tornado Alert™ has two buttons on the front panel. These buttons control the light strobe and audible alarms of the unit. The buttons have the following actions:

- When no alarms are active, pressing only the left button toggles the light strobe alarm on or off. Pressing only the right button toggles the audible alarm on or off. After a button is pressed, the LCD will display the status (on or off) of both alarm types. For example, if you wish to disable the strobe light, press the left button once. If the display indicates that the strobe is on, press the button again to turn it off. Pressing and holding both buttons at the same time for 5 seconds will disable both the strobe light and siren. The disabling of the strobe light and siren only apply to alarms for SEVERE STORM. TORNADO alarms will always activate both strobe light and siren. To re-enable the alarms, simply press the left button to re-enable the strobe, press the right button to re-enable the siren.
- When an alert alarm is active (strobe light is on or siren is on), the user can reset (temporarily turn off) both alarms by pressing either button. This reset of the alarms is only temporary. New events will reactivate the alarms as required.

Battery

When A/C power is lost, Tornado Alert™ continues operation with the user supplied 9-volt battery. Using either Industrial Grade or Lithium batteries will provide sufficient power during extended periods of A/C power loss. Battery life will be reduced by detecting and responding to weather conditions. When running on battery power, the LCD will display a battery icon on the far left of the bottom row. The size of the icon will reflect the approximate remaining battery power available. When nearing the end of the batteries useful life, the unit will sound short beeps of the audible alarm every 5 seconds to notify the user of a low battery condition.

When operating on battery, ensure that the A/C power has not accidentally become unplugged so that fresh batteries are not drained unintentionally!

When operating from the battery, Tornado Alert™ will make minimum use of the LCD backlight. When battery power is critically low, Tornado Alert™ will display the message “Shut Down” on the LCD and stop monitoring. Once A/C power is restored or the battery is replaced Tornado Alert™ will power back up and starts the Power up Sequence again.

Early Alert Technologies recommends battery replacement every 6 months or after extended battery use. Always insert new, fully charged Industrial Grade or Lithium 9-volt batteries.

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IMPORTANT! The Tornado Alert™ system contains no user serviceable parts and is not intended to be opened, except for battery installation. Opening the main case or attempting to service the unit will void all warranties.

Notices and Disclaimers

FCC Compliance

NOTE: This equipment has been tested and found to comply with the limit for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the responsible party could void the user's authority to operate the equipment.

Specifications

Power Supply	120VAC 60 Hz 6W 12VDC +-5% 200mA
Battery 9Volt (recommended)	Industrial Grade 560mAh or more Lithium 750mAh or more
Expected Battery Life	Industrial Grade – up to10 hours Lithium (750mAh) – up to 14 hours Lithium (1250mAh) – up to 21 hours
Status Indicator	Backlit 12 character LCD
Alarms	>90dB siren, Strobe, Multicolor LED
Ambient Operating Temperature Range	0^0C to 38^0C

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Warranty and Return Policy

Limited Warranty

Early Alert Technologies, LLC ("Early Alert") will repair or replace the Tornado Alert™ due to any defects in material or workmanship that occur during normal operation. The repair will be free of charge (including shipping charges) with new or refurbished parts for up to 90 days from the original purchase date. This warranty is only extended to the original purchaser and does not apply to any damage occurring during shipment, components not supplied by Early Alert or damage that results from the misuse, abuse, neglect, mishandling, accident, alteration, modification, lightning strikes, power surges, inappropriate AC or DC electrical power or service by anyone other than an authorized Early Alert service representative. If after reviewing this manual you feel that Tornado Alert™ is defective in any way, return the unit. Tampering with Tornado Alert™ in any way will void the warranty. Please contact Early Alert's technical support line at 877-932-5378 or support@tornadoalertme.com. You will be informed how to receive warranty service for the Tornado Alert™. The obligation of Early Alert under this warranty is limited to repairing or replacing the Tornado Alert™ or any part that is found to be defective in material, workmanship or design.

EXCEPT AS SET FORTH IN THIS WARRANTY, EARLY ALERT DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES DO NOT PERMIT LIMITATION ON WARRANTIES, SO THE ABOVE EXCLUSIONS MAY NOT APPLY TO YOU.

NO REMEDY UNDER THIS WARRANTY SHALL EXCEED THE COST OF REPLACEMENT OF THE TORNADO ALERT™. IN NO EVENT, SHALL EARLY ALERT OR ANY OF AFFILIATES OR SUBSIDIARIES BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES WHATSOEVER

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. If a problem develops with the Hardware after the warranty period please contact Early Alert at 722 SW Pine Tree Lane, Palm City, FL 34990; 877-932-5378.

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